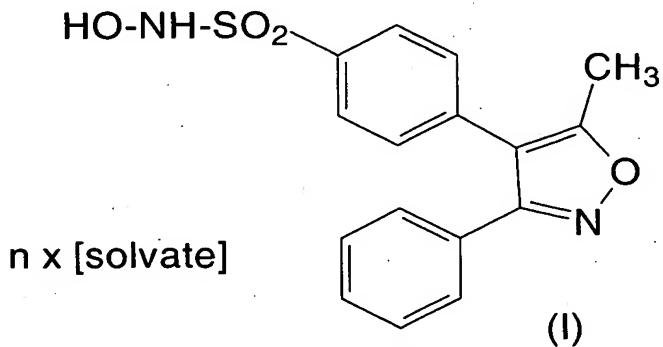


Claims

1. N-hydroxy-4-(3-phenyl-5-methyl-isoxazole-4-yl)-benzenesulfonamide solvates of formula (I)

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wherein n represents 0 or 1 mole,

[solvate] represents water, C₁-C₄ alcohol, C₁-C₄ alkylester of C₁-C₃ carboxylic acid or dioxane.

10 2. Compounds of formula (I) as claimed in Claim 1, wherein n=1 and the solvate represents water.

3. Compounds of formula (I) as claimed in Claim 1, wherein n=1 and the solvate represents ethylacetate.

15 4. Compounds of formula (I) as claimed in Claim 1, wherein n=1 and the solvate represents 2-propanol.

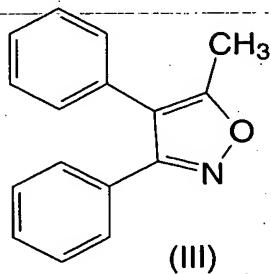
5. Compounds of formula (I) as claimed in Claim 1, wherein n=1 and the solvate 20 represents dioxane.

6. Compound of formula (I) as claimed in Claim 1, wherein n=0.

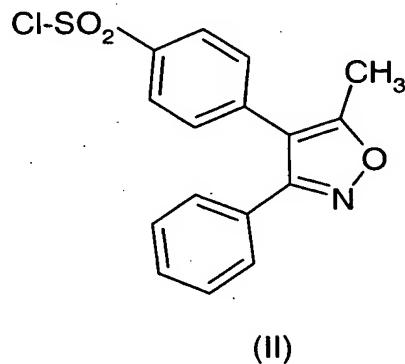
7. Mixture of compounds of formula (I) as claimed in Claim 1, wherein n=1 and of 25 compound of formula(I) as claimed in Claim 1 wherein n=0 .

8. Process for producing N-hydroxy-4-(3-phenyl-5-methyl-isoxazole-4-yl)-benzenesulfonamide solvates compounds of formula (I) wherein n=1 and solvate represents C₁-C₄ alkylester of C₁-C₃ carboxylic acid or dioxane, characterized by that the 3,4-diphenyl-5-methyl-isoxazole of formula (III)

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is reacted with chlorosulfonic acid and the product 3-phenyl-4-(4-chlorosulfonyl-phenyl)-5-methyl-isoxazole (II)



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is reacted with hydroxylamine

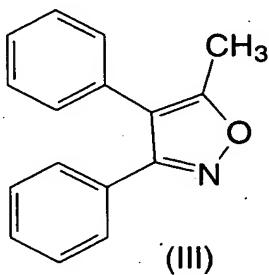
- a.) in mixture of water and water miscible solvent
- b.) in mixture of non-water-miscible solvent and water in presence of phase transfer catalyst,

15 and the product is crystallized from a solvent chosen from a C₁-C₄ alkylester of C₁-C₃ carboxylic acid or dioxane.

9. Process as claimed in Claim 8 characterized by that the phase-transfer catalyst is tetrabutylammonium hydrogensulfate.

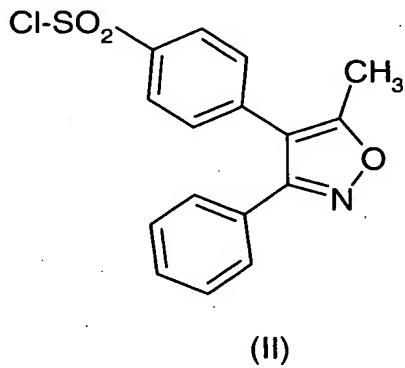
10. Process as claimed in Claim 8 characterized by that the recrystallization was carried out from ethyl acetate.

5 11. Process for producing N-hydroxy-4-(3-phenyl-5-methyl-isoxazole-4-yl)-benzenesulfonamide solvate compounds of formula (I) wherein n=1 and solvate represents water, characterized by that the 3,4-diphenyl-5-methyl-isoxazole of formula (III)



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is reacted with chlorosulfonic acid and the product 3-phenyl-4-(4-chloro-sulfonyl-phenyl)-5-methyl-isoxazole (II)



15 is reacted with hydroxylamine

- in mixture of water and water miscible solvent
- in mixture of non-water-miscible solvent and water in presence of phase transfer catalyst,

and the product is crystallized from a mixture of water and ethanol, optionally containing ascorbic acid.

12. Process for the preparation of compound of formula (I) wherein n=0 characterized by that the solvate is eliminated by heating from the compound of formula (I) wherein n=1.

13. Process for producing a mixture of compounds of formula (I) wherein n=1 and compound of formula (I) where n=0 in an optional ratio characterized by that the solvate can be removed in a required amount from the compounds of formula (I) where n=1 by heating and under reduced pressure.

14. Use of compounds of formula (I) claimed in any of Claims 1-6 for producing pharmaceutical composition for treatment of osteoarthritis and rheumatoid arthritis and surgical and primary dysmenorrheal pains, based on anti-inflammatory and analgesic pharmacological model experiments.

15. Use of mixtures as claimed in Claim 7 for producing pharmaceutical composition for treatment of osteoarthritis and rheumatoid arthritis and surgical and primary dysmenorrheal pains, based on anti-inflammatory and analgesic pharmacological model experiments.

16. Pharmaceutical composition containing a compound of formula (I) as claimed in any of Claims 1-6 and one or more therapeutically acceptable pharmaceutical carriers.

17. Pharmaceutical composition containing a mixture as claimed in Claim 7 and one or more therapeutically acceptable pharmaceutical carriers.

18. Pharmaceutical composition as claimed in Claim 16 characterized by that the one of the carriers is ascorbic acid.

19. A method for treatment of osteoarthritis and rheumatoid arthritis and surgical and primary dysmenorrheal pains, based on anti-inflammatory and analgesic pharmacological model experiments, said method comprising treating the patient in need with therapeutically effective dose of a compound of formula (I) as claimed in any of Claims 1-6.

20. A method for treatment of osteoarthritis and rheumatoid arthritis and surgical and primary dysmenorrheal pains, based on anti-inflammatory and analgesic pharmacological model experiments, said method comprising treating the patient in need with therapeutically effective dose of a mixture as claimed in Claim 7.

21. A method for treatment of osteoarthritis and rheumatoid arthritis and surgical and primary dysmenorrheal pains, based on anti-inflammatory and analgesic pharmacological model experiments, said method comprising treating the patient in need with therapeutically effective dose of a pharmaceutical composition as claimed in any of Claims 16-18.